POROKHIN, A., inzhener-podpolkovnik

Technology of maintenance has been changed. Tekh. i vooruzh. no.4:57 Ap '64. (MIRA 17:9)

VOL'SKIY, Ye.V., kand.tekhn.nauk; PORDKHIN, A.A., kand.tekhn.nauk

Applying the results of the research of the All-Union Scientific Research Institute of the Plywood Industry in production. Der.prom. 14 no.11:27-29 N '65. (MIRA 18:11)

POROKHIN, A. A. Cand Tech Sci -- (diss) "Study of the water permeability of ~~plywood~~ veneer plywood pipes." Len, 1957. 14 pp with graphs; 1 sheet of diagrams 21 cm. (Min of Higher Education USSR. Len Order of Lenin Forestry Engineering Acad im S. M. Kirov), 100 copies. (KL, 15-57, 106)

VOL'SKIY, Ye.V.; POROKHIN, A.A.

Semiautomatic production line in the section peeling-clipping-lay up of veneer sheets. Der.prom. 11 no.11:17-19 N '62. (MIRA 15:12)

(Veneeers and veneering) (Assembly-line methods)

1. POROKHIN, A. A., YEGOROV, A. N.

2. SSSR (600)

4. Pipe, Wooden

7. Plywood Pipes.
Der. i iesokhim. prom. 1 No. 2, 1952

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

BANKO, V.P.; DEMIDOVA, L.A.; ILYUSHIN, M.A.; KONDRASHKIN, Ye.P.; kand. tekhn.nauk; MIRKOVICH, R.A.; PLATNIKOVA, G.P.; POROKHIN, A.A., kand. tekhn.nauk; RUMYANTSEVA, O.M.; TEMKINA, R.Z., kand.tekhn.nauk; TIKHONOV, N.F.; SHVARTSMAN, G.M., kand.tekhn.nauk; SHEYDIN, I.A., kand.tekhn.nauk; SMIRNOV, A.V., red.; VOLOKHONSKAYA, L.V., red. izd-va; BACHURINA, A.M., tekhn.red.

[Veneerer's handbook] Spravochnik fanershchika. Vol.2. 1959. 333 p. (MIRA 13:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli. (Veneers and veneering)

SOV/48-23-8-20/25

24(3)
AUTHORS: Solntsev, G. S., Porokhin, A. G., Chistyakova, N. M.

TITLE: Measurement of Electric Fields of High-frequency Discharges at Low Pressure by Means of an Electron Beam

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 8, pp 1026-1030 (USSR)

ABSTRACT: In a high-frequency discharge the electric field consists of a superposition of the alternating field of high frequency on the constant field caused by spatial distribution of charges in the discharge space. Measurement of the electric field by means of the deflection of an electron beam was used for several investigations (Refs 1,2). In part I of the present paper, the experimental methods are described which were applied by the authors. The construction of the discharge plant is described in figure 1. It consists of a discharge tube, perpendicular to it are placed an electron accelerator and an observation screen. The discharge space may be changed by moving one of the electrodes from outside by means of a magnet. The shift of the electron beam is photographically recorded on the luminous screen. Figure 2 represents an example. To apply this method

Card 1/3

Measurement of Electric Fields of High-frequency Discharges at Low Pressure by Means of an Electron Beam

it is necessary that the time τ, which the electrons need to traverse the discharge space, is less than the oscillation period T. In the diagram of figure 1, the dependence of τ/T on frequency is described for four different acceleration voltages. It is found that the skin effect is of less importance, that the electric eddy field is negligible, and that the perturbation of electrons must be low in the space under discussion. The measurement results of experiments carried through in argon at a pressure of 10^{-2} torr and a frequency of 3.3 megacycles are summarized by the diagrams of figure 4. They show the distribution of the electric high-frequency field and of the space-charge field. Further, the instantaneous distribution of the potentials is investigated, and the distribution of the space-charge at various instants of the period is calculated by means of Poisson's equation. The results are shown in the diagram of figure 7 for three different phases. There are 7 figures and 5 references, 2 of which are Soviet.

SOV/48-23-8-20/25

Measurement of Electric Fields of High-frequency Discharges at Low Pressure by Means of an Electron Beam

ASSOCIATION: Moskovskiy gos. universitet im. M. V. Lomonosova Fizicheskiy fakul'tet (Moscow State University imeni M. V. Lomonosov, Department of Physics)

Card 3/3

Porokhin, G. A.

LAVROV, Vladimir Dmitriyevich; KASATKIN, S.S., inzh., retsenzent; POROKHIN, G.A., inzh., red.; EL'KIN, V.D., tekhn. red.

[Planning and recording experimental and research works in the manufacture of machinery] Planirovanie i uchet opytnykh i nauchno-issledovatel'skikh rabot v mashinostroenii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 142 p. (MIRA 14:9)

(Engineering research)

KOROLEV, A.N., gornyy inzhener.; POROKHIN, R.V., gornyy inzhener.; NIKOLIN, V.I., gornyy inzhener.

System of sublevel caving with greater sublevel interval. Gor. zhur. no.1:8-12 Ja '57. (MLRA 10:4)
(Mining engineering)

POROKHIN, V.I.

Graphic pulse recording in cattle. Veterinariia 40 no.7:57 Jl '63. (MIRA 16:8)

1. Vologodskiy molochnyy institut.
(Sphygmometry) (Veterinary instruments and apparatus)

ZUB, K.Ya.; BOCHAROV, V.I.; KHASAY, V.P., inzh.; KOPTSOV, N.S.; KODINTSEV, I.; STANISLAVCHUK, P.E.; POBOKHIN, Ye.; SIDOROV, N.I., inzh. red.; USENKO, L.A., tekhn. red.

[The VL60 electric locomotive] Elektrovoz VL60; instruktsionnaia kniga. Moskva, Transzheldorizdat, 1963. 250 p. (MIRA 16:8)

1. Novocherkasskiy elektrovozostroitel'nyy zavod.
(Electric locomotives)

KALISHEVICH, S.V.; POROKHNEVICH, N.V.

Effect of zinc on the size of plastids and their pigmentation in hemp leaves. Bot. i issl. Bel. otd. VBO no.6:18-22 '64. (MIRA 18:7)

POROKHNEVICH, N.V.

Effect of zinc deficiency on some anatomic indicators of bast fibers of flax. Dokl. AN BSSR 6 no.12:798-800 D '62. (MIRA 16:9)

1. Belorusskiy gosudarstvennyy universitet imeni V.I.Lenina.

KALISHEVICH, S.V.; POROKHNEVICH, N.V.

Effect of gibberellic acid on the atomic structure of hemp stems. Fiziol. rast. 11 no.2:206-209 Mr-Ap '64. (MIRA 17:4)

1. Department of Plant Physiology, Byelorussian State University, Minsk.

POROKHNYA, A.D.

Effect of various space arrangements on the growth of leaves and the accumulation of dry matter in hybrid corn. Sbor. trud. asp. i mol. nauch. sotr. VIR no.5:79-86 '64. (MIRA 18:3)

POROKHNYA, G.A., inzh.

Machine for preparing reinforced concrete slabs by a method of vertical vibration molding in a sliding mold. Stroi. i dor. mash. 6 no.3: 28-31 Mr '61. (MIRA 14:4)

(Vibrated concrete)

POROKHNYA, G.A., inzh.

Making reinforced concrete panels in vertical vibroforms. Transp. stroi. 11 no.1:27-30 Ja '61. (MIRA 14:1)
(Vibrators) (Concrete slabs)

A L 10214-66

ACC NR: AP5028542 SOURCE CODE: UR/0286/65/000/020/0152/0152

AUTHORS: Stramous, M. F.; Savotin, G. I.; Porokhnya, G. A.; Perelyayev, Yu. N.; Lysov, N. I. 44 44 44 44 44 23 B

ORG: none

TITLE: A machine for building levees along alluvial plains and for forming land slopes. Class 84, No. 175897 [announced by Design and Construction Bureau of Glavstroymekhanizatsiya of the State Production Committee on the Transport Construction SSSR (Proyektno-konstruktorskoye byuro glavstroymekhnizatsii gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 152

TOPIC TAGS: excavating machinery, construction machinery

ABSTRACT: This Author Certificate presents a machine for building levees on alluvial plains and for forming land slopes. The machine contains a working member with numerous buckets for transverse excavations (see Fig. 1). This member is supported by a bearing-turning platform. To assure the possibility of levee building and slope forming, as well as trench excavating, the working member is placed on the turning platform eccentrically in respect to its axis of rotation. The rear part of the machine contains a transverse carrier and a demountable stopping baffle fixed to the frame of the working member. The body of each bucket may be open at the bottom, while

UDC: 621.879.443.6

Card 1/2

L 10214-66

ACC NR: AP5028542

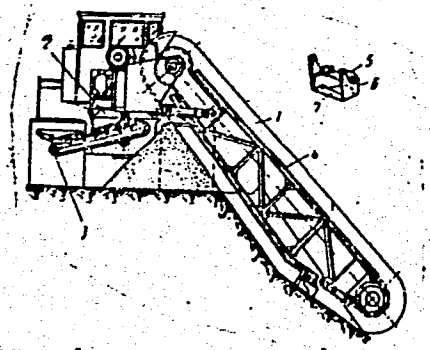


Fig. 1. 1 - Working member with numerous buckets, for transverse excavation; 2 - supporting-turning platform; 3 - carrier; 4 - frame of the working member; 5 - bucket; 6 - open body; 7 - blade.

a blade is fixed in its foremost part. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 02Mar64

Card 2/2

BAZILEVICH, V.M. [Bazylevych, V.M.]; POROKHONSKAYA, O.M. [Porokhons'ka, O.M.]

Transportation of Coregonus peled Gmelin at the stage of two-week old larvae. Visnyk Kyiv.un. no.2. Ser.biol. no.1:145-147 '59. (MIRA 16:4)
(WHITEFISHES) (FISHES--TRANSPORTATION)

MOVCHAN, V.A.; AHROSIMOVA, A.M.; GORYAINOVA, N.S.; POROKHONSKAYA, Ye.M. [Porokhons'ka, IE.M.]

Studying the productivity of fishes in the "Greater Supoy" streambed pond. Nauk. zap. Kyiv. un. 15 no.11:35-41 '56. (MIRA 11:5)

(Fish ponds)

Name: PORCKHOV, Fedor Fedorovich

Dissertation: Clinical picture, pathogony, and treatment in Taylor's Disease of cattle

Degree: Doc Vet Sci

Affiliation: Ivanovo Agr Inst

Defense Date, Place: 2 Jul 56, Council of Moscow Vet Acad

Certification Date: 21 Sep 57

Source: BMVO 22/57

POROKHOV, F.F., prof.

Pathogenesis of theileriasis in cattle. Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19:194-208 '62.

Dynamics of parasitic reaction in theileriasis of cattle. Ibid.:209-214 (MIRA 17:1)

1. Kafedra veterinarii i zoogigiyeny (zav. - prof. F.F. Porokhov) Ivanovskogo sel'skokhozyaystvennogo instituta.

POROKHOV, F.F., prof.; NALETOV, A.V., [deceased]; Prinimali uchastiye: SKOVORODIN, N.M.,assistent; GRECHISHNIKOVA, G.D., starshiy laborant; KROTKOV, A.N., veter. vrach; SUKHANOV, K.M., veterin, vrach

Importance of the biomycin-vitamin concentrate in a combination of measures for ridding farms of infectious atrophic rhinitis of swine. Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19: 155-159 '62. (MIRA 17:1)

1. Kafedra veterinarii i zoogigiyeny (zav. - prof. F.F. Porokhov) Ivanovskogo sel'skokhozyaystvennogo instituta. 2. Nachal'nik Ivanovskogo oblastnogo veterinarnogo otdela (for Naletov). 3. Uchebnoye khozyaystvo "Vasil'yevskoye", Ivanovo (for Sukhanov).

PYROKHOV, F.F., dotsent, doktorant.

Compound pathogenetic treatment of theileriasis in cattle. Veterinariia 33 no.3:30-34 Mr '56. (MLRA 9:5)

1. Moskovskaya veterinarnya akademiya.
(THEILERIASIS) (BROMIDES) (NOVOCAINE)

KALETOV, A.V. (Chief, Veterinary Department, Ivanov Oblast' Administration of Agriculture) and POROKHOV, F.F. (Professor, Ivanov Agricultural Institute).

"Diagnosis, prophylaxis and treatment of edematous swine disease..."
Veterinariya, vol. 39, no. 3, March 1962 pp. 42

L 58360-65 EWG(j)/EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(j)/T/EWA(h)/EWA(l)
Pc-4/Pr-4/Ps-4/Pt-7/Peb/Pu-4 WW/GG/RM

ACCESSION NR: AP5018038 UR/0191/65/000/007/0035/0038
678.06-419:677.521:621.039.83

AUTHOR: Kiselev, B. A.; Yegorova, Z. S.; Karpov, V. L.; Bodrova, V. V.; Porokhor, V. S.

64
B

TITLE: Use of irradiation to improve glass-reinforced plastics

SOURCE: Plasticheskiye massy, no. 7, 1965, 35-38

TOPIC TAGS: glass reinforced plastic, property improvement, irradiation, gamma radiation

ABSTRACT: The feasibility of substituting α-irradiation for heat treatment in order to improve the mechanical properties of very thick glass-reinforced plastics (GRP) has been studied because heat treatment sometimes causes undesirable side effects. GRP based on the following binders were irradiated with small doses (up to 100 Mrad): EP-32-301 (epoxy-phenol type), FN (phenol-furfural-formaldehyde type), VFT-S (phenol-formaldehyde + polyvinyl butyral + an organosilicon monomer [unspecified]), and SK-9E (epoxy + an organosilicon monomer). The effect was determined of the α-irradiation on various mechanical and physical properties whose improvement is desirable, such as tensile strength, modulus of elasticity, and, in some cases, softening point.

Card 1/2

L 58360-65

ACCESSION NR: AP5018038

It was found that irradiation with small doses improves the physical and mechanical properties of GRP based on binders containing double bonds or epoxy groups. On the other hand, such irradiation impaired the properties of GRP based on modified phenol-formaldehyde and organosilicon binders which contain no double bonds or epoxy groups. [SM]
Orig. art. has: 5 tables and 6 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT, NP

NO REF SOV: 001 OTHER: 000 ATD PRESS: 4047

Card 2/2

KISELEV, B.A.; YEGOROVA, Z.S.; KARPOV, V.L.; BODROVA, V.V.; POROKHOV, V.S.

Use of irradiation in the manufacture of glass plastics. Plast. massy no.7:35-38 '65. (MIRA 18:7)

S/124/61/000/008/007/042
A001/A101

AUTHORS: Kodnir, D.S., Porokhov, V.S.

TITLE: Reducing dimensions and increasing the carrying capacity of three-stage cylindrical gear reducers

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 8, 1961, 18, abstract 8A164 ("Tr. Kuybyshevsk. aviats. in-t", 1958, no. 7, 149 - 158)

TEXT: It is possible to reduce dimensions or increase the carrying capacity of a three-stage cylindrical gear reducer by means of changing of the breakdown of the summary gear ratio, adopted at present, in individual stages. The optimum variant of breakdown of the summary gear ratio is obtained by analytical calculations carried out under condition that interaxial separations and radii of gear wheels are limited by the contact strength. The reducer volume will be practically the least, if the radius of the third-stage wheel is equal to the radius of the second-stage wheel. The gear-ratio of the second stage must be equal to the square of the gear ratio of the third stage, and the gear ratio of the first stage must be equal to the quotient resulting from division of the reducer's summary gear ratio by the third power of the third-stage gear

Card 1/2

Reducing dimensions ...

ratio. The breakdown of the summary gear ratio in stages, derived by taking into account this recommendation, is made more precise during designing; it turns out to be possible either to reduce the volume of the reducer by 30 - 50% or, at the same dimensions, to increase its carrying capacity. The authors compiled a numerical series of gear ratios for three-stage reducers.

N. Krasnoshchekov

[Abstracter's note: Complete translation]

Card 2/2

S/179/60/000/03/032/039
E081/E441

AUTHORS: Genkin, M.D. and Porokhov, V.S. (Moscow)

TITLE: Investigation of the Nature of the Change in the Friction Coefficient under Different Conditions of Rolling of Lubricated Elastic Surfaces

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, Nr 3, pp 168-170 (USSR)

ABSTRACT: The paper gives experimental results for pairs of rollers (diameters D_1 = 80 mm, D_2 = 120 mm) made from 3 kinds of steel: 12X2H4A (cementated, hardened, tempered); 40X (hardened, tempered); and 38XMYUA (no thermal treatment). The lubricant consisted of 50% MK8 + 50% MC20. Experiments were made in pure rolling, rolling with small fixed slip (corresponding to small values of α (= U/V), where U and V are respectively the difference and sum of the circumferential velocities) and frictional rolling (one of the rolls was disconnected from its driving shaft and was rotated by the frictional contact forces). Fig 1 shows the dependence of friction coefficient f (= frictional force/normal load) on α for technically pure rolling

Card 1/3

S/179/60/000/03/032/039
E081/E441

Investigation of the Nature of the Change in the Friction Coefficient under Different Conditions of Rolling of Lubricated Elastic Surfaces

and for different values of the velocity V (m/sec) at $T = 50°C$. [Abstractor's note: σ is not defined in the paper; it is given in t/cm^2, possibly $tons/cm^2$.] Fig 2 shows the relation between f and α (V shown in m/sec on the curves; for curves 1 to 6, $\sigma = 7$ t/cm^2; for curve 7, $\sigma = 56$ t/cm^2; for curve 8, $\sigma = 4$ t/cm^2; $T = 100$ for the first curve and $T = 50$ for the remainder). Fig 3 shows the dependence of friction coefficient f on σ and V (m/sec) in frictional rolling (steel 12X2H4A) for different values of σ (t/cm^2) at $T = 37°$ and Fig 4 shows the dependence of f on V for different temperatures in frictional rolling (steel 12X2H4A) under load $\sigma = 5.6$ t/cm^2. The data give information on the limits of the rolling regime of elastic bodies, improve some conceptions in the contact-hydrodynamical theory of lubrication and suggest some reasons for the variability of the friction coefficient in the contact zone. There are 4 figures

Card 2/3

S/179/60/000/03/032/039
E081/E441

Investigation of the Nature of the Change in the Friction Coefficient under Different Conditions of Rolling of Lubricated Elastic Surfaces

and 3 Soviet references.

ASSOCIATION: Institut mashinovedeniya, Akademii nauk SSSR
(Institute of Machine Practice, Academy of Sciences USSR)

SUBMITTED: December 26, 1959

Card 3/3

GENKIN, M.D., kand.tekhn.nauk; POROKHOV, V.S., inzh.; MISHARIN, Yu.A., kand.tekhn.nauk

Friction coefficients for the case of "technically pure" rolling of lubricated rolls. Vest.mash. 40 no.5:13-15 My '60. (MIRA 14:4)

(Roller bearings)

L 22144-66 EWT(d)/EWT(m)/T DJ

ACC NR: AP6012954 SOURCE CODE: UR/0122/65/000/003/0032/0033

AUTHOR: Porokhov, V. S. (Engineer)

24
23
B

ORG: none

TITLE: New method for the experimental study of an involute gear drive

SOURCE: Vestnik mashinostroyeniya, no. 3, 1965, 32-33

TOPIC TAGS: transmission gear, mechanical power transmission device

ABSTRACT: In constructing a model of a higher kinematic gear meshing pair, it is necessary to start with the principles on which the meshing itself is constructed. This is done by constructing two flat cams, one of which represents the pinion, while the other represents the wheel. The cams are specially profiled to give a linear change in the radii of curvature along the line of meshing, and a constant value for the sun of the radii of curvature. A diagram is given in the article showing how to design such a pair of cams. Two of the cams in contact, turned 180° with respect to one another, correspond to a drive with four teeth. The number of teeth on the model may be made equal to the number of teeth on the wheel, but making up such a cam produces great engineering difficulties. The profile of the cam is an Archimedes spiral.

Card 1/2 UDC: 621.833.001.5

L 22144-66

ACC NR: AP6012954

When the cams are operating there are no dynamic loadings produced by errors in circular spacing or pliability of the tooth, there is a different rigidity than in a tooth on the wheel or the pinion, and there is no redistribution of load at the overstressed points. Everything else is similar to the conditions under which involute meshing operates. An experimental study made with these cams under conditions where there is a continuous change in the slip rate makes it possible to determine: The qualitative and quantitative changes in the friction forces along the meshing line or with slip velocity, the position of the zone of minimum contact strength, the true fatigue crumbling limit, the magnitude and nature of the wear along the meshing line, and the effect of correction coefficients on the magnitude and nature of the friction forces, the position of the zone of minimum contact strength, the fatigue crumbling limit, the wear, etc., since when these or other correction coefficients are used, there is a change in the profile of the cam. It is also possible to find the effect of acceleration on all the phenomena occurring in contact of the convex surfaces. This is done by means of a series of cams, by choosing the rpm for different values of the sum of the radii of curvature. This gives constant slip velocities, and there are only variable accelerations which are a function of the rpm. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 13 / SUBM DATE: none

Card 2/2 BK

POROKHOV, V.S.; BOGACHEV, M.N.

Surface hardening of parts by shot peening. Mashinostroitel' no.10: 21 0 '65. (MIRA 18:10)

GENKIN, M.D., kand.tekhn.nauk; MISHARIN, Yu.A., kand.tekhn.nauk; POROKHOV, V.S., aspirant

Investigating the characteristics of changes in friction coefficients in case of rolling with minor sliding. Izv.vys.ucheb.zav.; mashinostr. no.1:63-68 '60. (MIRA 14:5)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana i Institut mashinovedeniya AN SSSR.
(Friction)

25(2) SOV/117-59-8-40/44

AUTHOR: Porokhov, V.S., Engineer

TITLE: A Device for Regulating the Stroke of the Piston Rod in Crank Drives

PERIODICAL: Mashinostroitel', 1959, Nr 8, p 45 (USSR)

ABSTRACT: The described and illustrated device consists of a ball bearing with one outer race coupled with the piston rod and rocking with it, and two inner races with a cam inside. The length of the piston rod stroke depends upon the position of the cam in relation to the races. The adjustment is done by loosening the screws joining the inner bearing races, and displacing them on the cam. The piston rod stroke is measured on a special limb graduated on the cam, or on one of the bearing races. There is 1 diagram.

Card 1/1

POROKHOV, V.S., inzh.

Driving regulator for crankgears. Mashinostroitel' no.8:45 Ag '59. (MIRA 12:11)
(Governors (Machinery))

POROKHOV, V.S.

Jets for sandblasting and shot peening of part surfaces. (MIRA 17:10)
Mashinostroitel' no.9:39 S '64.

S/122/60/000/005/002/017
A161/A130

AUTHORS: Genkin, M. D., Candidate of Technical Sciences; Porokhov, V. S., Engineer, and Misharin, Yu. A., Candidate of Technical Sciences

TITLE: Friction coefficients at "technically pure" rolling of lubricated rollers

PERIODICAL: Vestnik mashinostroyeniya, no. 5, 1960, 13-15

TEXT: The so-called pure rolling phenomenon in gear transmissions and ball and roller bearings had been repeatedly treated theoretically but never verified in experiments. It was the purpose of experiments described in this article to produce technically pure rolling(for really pure is not possible practically because of inavoidable contact deformation band), to examine the friction and to determine the range of existence of the phenomenon. The experiment installation was analogous with one described by N. F. Kuz'min (Ref. 4: O koeffitsiyente treniya v tyazhelonagruzhennom kontakte, "Vestnik mashinostroyeniya", no. 5, 1954). The specimens were case hardened, quenched and tempered steel rollers. The temperature in one of the rollers was measured with a chromel-copal thermocouple connected close to contact spot, recorded with a potentiometer, and maintained at

Card 1/4

50, 75 and 100°C by electric heating of oil with different viscosity. The friction moment under different load was determined as relation of contact friction force to load on the rollers. The rollers (Fig. 1) were all made with same ±0.01 mm tolerance but gave different friction moments in different combinations with each other, therefore, they were fitted separately by lapping until a minimum $\alpha = \frac{v_{vel}}{v_{\Sigma}}$ was reached (where v_{vel} is sliding velocity equal to the difference of the Σ circumferential velocities of the rollers in relation to the contact line); α was calculated using the mean arithmetical value of dimensions given in Fig. 1. Taking into account the kinematic chain of the experiment machine,

$$\alpha = \frac{1.5\,D_1 - D_2}{1.5\,D_1 + D_2}$$

(where D_1 is the diameter of the smaller roller, and D_2 of the larger one). The α value varied between 0.0001 and 0.003%. The experimental data show a very low friction factor at technically pure rolling (not above 0.008 at any temperature, velocity and pressure). It practically does not depend on temperature and its increase with stress is generally linear, the variations with varying summary rolling velocity fit the existing theoretical conceptions. A formula is derived for the friction factor calculation and recommended for practical use:

Card 2/4

Friction coefficients ...

$$f = k \frac{\sigma^{\beta}}{v^{\alpha\gamma}} \cdot \frac{1}{\rho_o^{0.5}}$$

where ρ_o is the reduced curvity radius in cm,

$$\rho_o = \frac{R_1 R_2}{R_1 + R_2} .$$

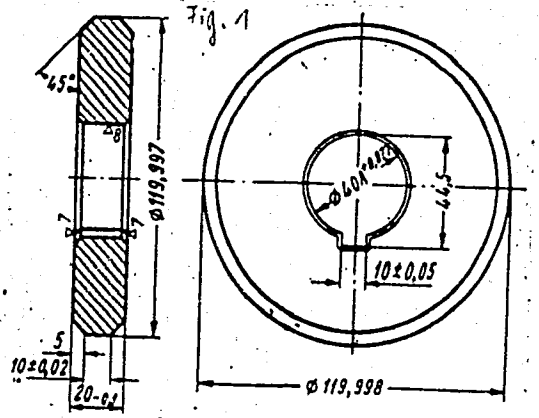
The k factor at $v_\Sigma \leq 8$ m/sec may be assumed equal to $0.343 \cdot 10^{-5}$; at $v_\Sigma < 8$ m/sec $k = 0.379 \cdot 10^{-5}$; at $v_\Sigma > 25$ m/sec and $\sigma > 8{,}000$ kg/cm^2 $k = 0.591 \cdot 10^{-5}$. The formula is recommended explicitly for the parameters range indicated. It does not take into account the properties of oil and metal. Yet, in pure rolling these factors cannot have any considerable effect. The friction factors remained approximately constant in the range of α between 0.0001 and 0.0034%, but grew abruptly when α increased above this range. The friction factor increase is expressed practically with a straight line with an angle, and $\alpha = 0.003$-0.004% is the limit point of technically pure rolling. It is evident that the friction factor in pure rolling is much lower than in rolling with sliding. Machining accuracy considerably higher than 1st class is needed to produce technically pure rolling. A difference in rolling velocities exists practically always, and it

Card 3/4

Friction coefficients ...

already determines the friction factor. The effect of stress value in pure rolling is considerable, but in combined rolling and high sliding it was not stated. There are 5 figures, 1 table and 8 Soviet-bloc references.

Fig. 1:



Card 4/4

POROKHOV, V.S.

Method of controlling the inner surface hardening of tubes.
Zav. lab. 30 no.1:94 '64. (MIRA 17:9)

L 04200-67 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD
ACC NR: AP6028592 SOURCE CODE: UR/0129/66/000/008/0068/0069

43
B

AUTHOR: Porokhov, V. S.; Bogachev, M. N.

ORG: none

TITLE: The effect of residual stresses on the fatigue strength of 30KhGSA steel

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 8, 1966, 68-69

TOPIC TAGS: stainless steel, fatigue strength, residual stress, shot blasting, hydraulic fluid / 30KhGSA steel

ABSTRACT: Changes in fatigue strength were determined as a function of residual stress in 30KhGSA steel heat treated to a R_c hardness of 36-38. Variations in surface residual stress were introduced by different strengthening methods: 1) knurl rolling, 2) centrifugal ball method, 3) dry shot blasting, and 4) shot blasting in a stream of vapor. Residual stress is given as a function of distance from the surface for each method. For each method of residual stress application, fatigue curves were obtained under identical conditions. Fatigue testing was done with a symmetrical loading cycle at a frequency of 1450 cycles/min. The fatigue strength of the steel increased with rise in the value of compressive residual stress in the surface layer. The largest increase occurred in samples which were strengthened by shot blasting in a stream of

UDC: 539.373:620.178.311.2

Card 1/2

L 33505-65 EWG(j)/EWT(m)/EPF(c)/EWP(j)/T/EWA(h)/EWA(l) Pc-4/Pr-4/Peb RM
S/0081/64/000/018/S086/S086

ACCESSION NR: AR5003893

31 B

SOURCE: Ref. zh. Khimiya, Abs. 18S498

AUTHOR: Isayev, A. S.; Medvedev, M. N.; Porokhov, V. I.; Pilipenko, T. D.

TITLE: Scintillators made from block polystyrene 15

CITED SOURCE: Sb. Stsintillyatory i stsintillyats. materialy. Khar'kov, Kharkovsk. un-t, 1963, 29-32

TOPIC TAGS: scintillator, polymerization, styrene polymerization, polystyrene

TRANSLATION: Scintillators of any desired configuration were produced by pressing block polystyrene in the form of granules with scintillating substances (1.5% RFO and 0.02% RORDR). The temperature was controlled with thermocouples mounted in the upper and lower halves of the press-form. Polystyrene granules were first washed with tap water and then with distilled water and dried at 70-80°C. The granules were placed in the press-forms in layers, wetted with liquid styrene containing scintillating substances. The recommended amount of solution is equal to or greater than 16% of the weight of the scintillator. After 1 hour vacuum treatment

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L 33505-65
ACCESSION NR: AR5003893

under 2-3 mm of Hg pressure in the press-form, heating was started at a rate of 50° per hour. After 2 hours holding at 165°C the temperature was lowered to 145°C, 4-5 kg/cm^2 pressure was applied and the entire mass was slowly cooled. The pressure was removed at 60-50°C and the specimen was withdrawn. Eight hours are required to produce scintillators 200 mm in diameter and 50 mm thick. The pulse amplitudes from the scintillators were determined from 4 samples 30 × 30 mm^2 by irradiation with γ-rays from a Co^{60} source using an FEU-29 photomultiplier. It was found that scintillating substances are uniformly distributed throughout the scintillator. The pulse amplitudes and the thermal stability of scintillators produced by pressing in a vacuum and by high temperature polymerization of styrene are similar. (See *Ref. Zhur. Khim.*, 1964, 3S378). L. Kotlyarevskaya.

SUB CODE: OP, OC ENCL: 00

Card 2/2

ZAYTSEVA, Lidiya Pavlovna; [illegible]OKHOVA, Tat'yana Grigor'yevna; FOMIN, N.V., red.

[Nonferrous metallography in visible and ultraviolet rays] TSvetnaia metallografiia v vidimykh i ul'trafioletovykh luchakh. Moskva, Izd-vo Metallurgiia, 1964. 142 p. (MIRA 17:7)

USSR/Metals - UV Microscopic Investigation Feb 52

"Application of Color Ultraviolet Microscopy to Investigation of Structure of Solid Solutions of Metals," L. P. Zaitseva, T. G. Porokhova

"Zhur Tekh Fiz" Vol XXII, No 2, pp 294-299

New method of ultraviolet microscopy by Ye. M. Brumberg (cf. "Iz Ak Nauk SSSR, Ser Fiz" 6,32, 1942; "Dok Ak Nauk SSSR" 32,486 1941), using color microscopy to investigate microstructure of solid soln, obtained during crystn process, was applied to combinations Cu - Si, Al - Zn and Sb - Bi in order to confirm previous research obtained by

209T86

USSR/Metals - UV Microscopic Investigation Feb 52 (Contd)

other means. Method proved efficient in rapid qual detn and partially in quant detn of various structural components of alloy. Research was guided by Ye. M. Brumberg and G. A. Kashchenko. Received 18 Jan 51.

209T86

POROKHOVA, T. G.

POROKHOVA, T. G.

USSR/Metals - Reflection of Ultraviolet Feb 52

"Spectral Reflection of Metals in Spectral Band 220-250 mμ," T. G. Porokhova

"Zhur Tekh Fiz" Vol XXII, No 2, pp 308-312

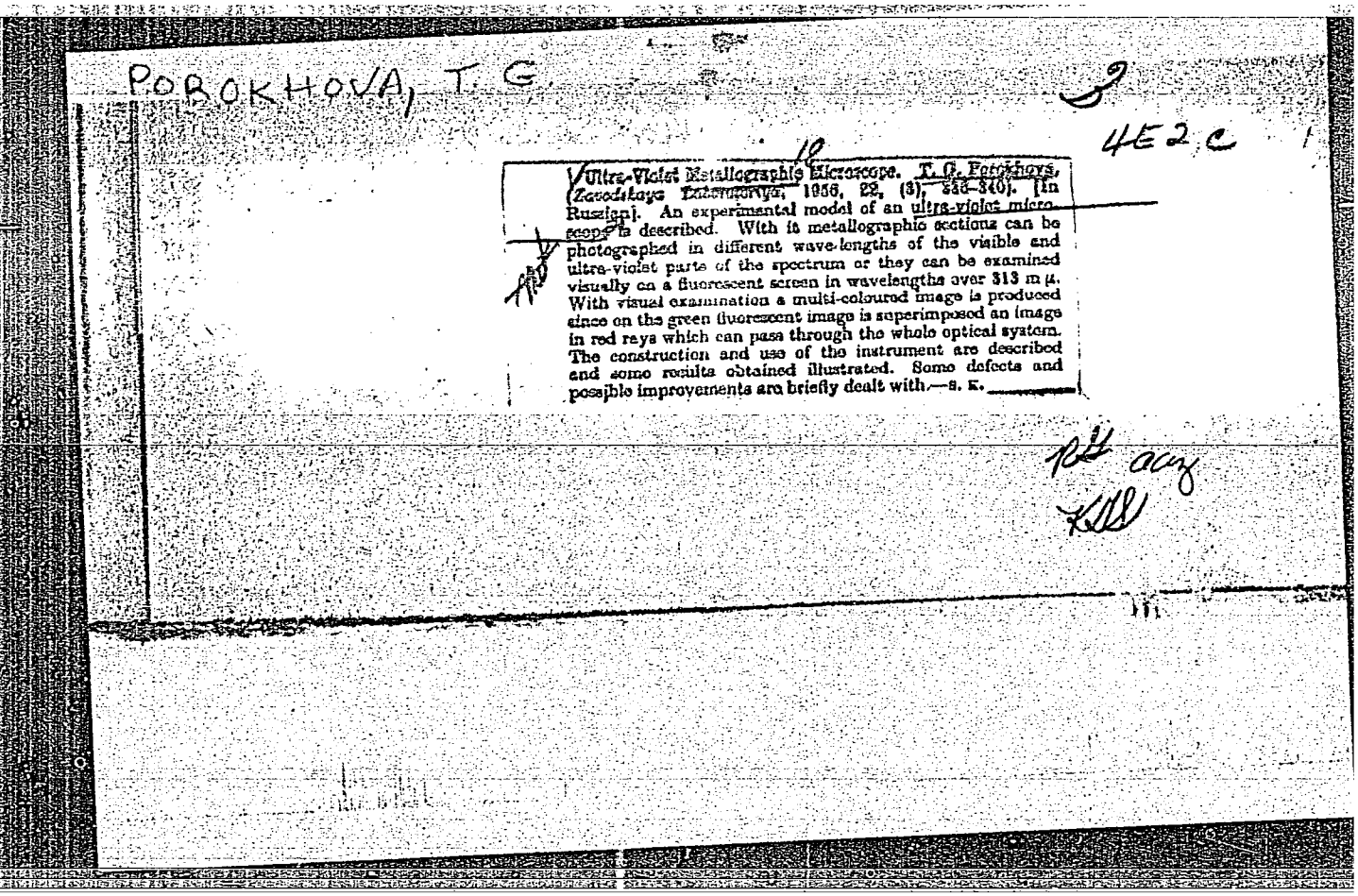
Knowledge of reflection curves in ultraviolet of pure metals and metaloids are necessary to enable application of Ye. M. Brumberg's method (cf. "Dok Ak Nauk SSSR" 25, 473, 1937; "Iz Ak Nauk SSSR, Ser Fiz" 6, 32, 1942; see previous abstract, ibid. pp 294-299. Authoress presents reflection curves of a number of pure metals and metaloids, obtained by her experimentally. Indebted to Ye. M. Brumberg for guidance. Received 2 Oct 51.

209T88

POROKHOVA, T. G.

Porokhova, T. G. -- "Application of the Methods of Color Transformation to Metallography." Cand Tech Sci, State Optical Inst, 1953.
(Referativnyy Zhurnal--Khimiya, No 1, Jan 54)

So: SUM 168, 22 July 1954



POROKHOVA, T. G.

4E2c

Ultra-Violet Metallographic Microscope. T. G. Porokhova, *Zavodskaya Laboratoriya*, 1956, 22, (3), 338–340. [In Russian]. An experimental model of an ultra-violet microscope is described. With it metallographic sections can be photographed in different wave-lengths of the visible and ultra-violet parts of the spectrum or they can be examined visually on a fluorescent screen in wavelengths over 313 mμ. With visual examination a multi-coloured image is produced since on the green fluorescent image is superimposed an image in red rays which can pass through the whole optical system. The construction and use of the instrument are described and some results obtained illustrated. Some defects and possible improvements are briefly dealt with.—S. K.

Porokhova, T. G.

32-7-16/49

AUTHOR: Porokhova, T.G.

TITLE: Investigation of Metal Microstructure Under the Ultraviolet Microscope
(Vyyavleniye mikrostruktury metallov s pomoshch'yu ul'trafioletovogo mikroskopa)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 7, pp. 813 - 817 (USSR)

ABSTRACT: According to Brumberg's method of color transformation, colored images of the objects to be investigated are produced on the basis of the diversity of the absorption coefficients or the radiation reflexes of different wave lengths (the infrared visible and the ultraviolet spectral part included). This method makes it possible to distinguish the phases of alloying according to their coloring. Investigation of the colored ground surfaces in the ultraviolet rays are produced visually upon the fluorescence screen of the ultraviolet microscope, and are photographed by means of the chromoscope. As some metals and their compounds have a total reflection in the ultraviolet spectrum, on which occasion they assume a characteristic coloring, it is possible, by means of the ultraviolet microscope, to determine their presence and thus to determine their

Card 1/2

ZAYTSEVA, L.P.; POROKHOVA, T.G.

Investigating the structure of iron-titanium-carbon and iron-niobium-carbon alloys by color microscopy in ultraviolet rays. Trudy LPI no. 234:8-17 '64. (MIRA 17:11)

L 08954-67 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/GG

ACC NR: AP6009185 SOURCE CODE: UR/0146/65/008/005/0152/0157

AUTHOR: Kapustina, T. P.; Porokhova, T. G.; Tarnovskaya, L. V.

ORG: Leningrad Institute of Fine Mechanics and Optics (Leningradskiy institut tochnoy mekhaniki i optiki)

TITLE: Structure of surface layer of polished silicon slabs

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 5, 1965, 152-157

TOPIC TAGS: crystalline silicon, silicon single crystal, metal polishing

ABSTRACT: The tentative results are reported of a study of the Si-slab surface relief after the surface has been mechanically polished; "polirit," crocus, and oxides of Th, Ce, Cr, Al, Ti were used as polishing materials. The surface microroughness was measured by a multibeam interferometer; a minimum surface irregularity of 100 Å could be detected. The best polishing results were

Card 1/2 UDC: 621.315.592

L 08954-67 O

ACC NR: AP6009185

obtained with a very fine chromium oxide. The deepest (300--1000 Å) microchecks were formed when the Si surface was polished by a coarse chromium oxide. Polishing wheels made from pitch-colophony, butylmethacrylate, polyvinyl chloride, and caprone netting were tested; the polyvinyl-chloride and pitch-colophony wheels left deeper scratches (up to 430 Å) on the Si surface than other wheel materials. The absence of Si-crystal destruction at depths of 500-1000 Å was proven by etching off the polished surface layer and examining the crystal on a 40000x electron microscope. Orig. art. has: 4 figures and 2 tables.

SUB CODE: 20 / SUBM DATE: 24Sep64 / ORIG REF: 001 / OTH REF: 007

Card 2/2 nst

KAPUSTINA, T.P.; POROKHOVA, T.G.; TARNOVSKAYA, L.V.

Structure of the surface layer of polished silicon plates.
Izv. vys. ucheb. zav.; prib. 8 no.5:152-157 '65.
(MIRA 18:10)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy teorii opticheskikh priborov.

KAPUSTINA, T.P.; POROKHOVA, T.G.; TARNOVSKAYA, L.V.

Surface layer structure of polished silicon and germanium plates. Izv. vys. ucheb. zav.; prib. 7 no.4:9-15 '64
(MIRA 18:1)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy teorii opticheskikh priborov.

ZAYTSEVA, L.P.; POROKHOVA, T.G.; MANVELOVA, K.V.

Investigating the structure of iron-tungsten-carbon and iron-molybdenum-carbon alloys with the help of color microscopy in ultraviolet rays. Trudy LPI no.234:18-24 '64. (MIRA 17:11)

ACCESSION NR: AP4043559 S/0146/64/007/004/0009/0015

AUTHOR: Kapustina, T. P.; Porokhova, T. G.; Tarnovskaya, L. V.

TITLE: Structure of the surface layer of silicon and germanium ground plates

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 4, 1964, 9-15

TOPIC TAGS: semiconductor, semiconductor surface, semiconductor crystal, germanium surface, silicon surface

ABSTRACT: The surface layer with a disturbed (by grinding) crystal structure comprises three zones: (1) an outer relief zone consisting of randomly arranged ridges and valleys; (2) the thickest zone with single chips and deep cracks; and (3) a single-crystal zone without mechanical faults but with elastic deformations. Two first zones were experimentally investigated; both probe-type profilometers and interferention microprofilometers (design suggested by A. N. Zakhar'yevskiy) were used for studying the first zone; finer studies were made by optical and

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ACCESSION NR: AP4043559

electron microscopes. The depth of each zone was determined by successively polishing off the surface and accurately weighing the specimen. Some results of grinding by carborundum, boron carbide, quartz, artificial corundum, glass, and polyvinyl chloride are reported. The thickness values of the first and second zones obtained by grinding with M14—M5 abrasives are tabulated. Orig. art. has: 5 figures and 3 tables.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Fine Mechanics and Optics)

SUBMITTED: 07Feb64 ENCL: 00

SUB CODE: EC NO REF SOV: 005 OTHER: 000

Card 2/2

ACCESSION NR: AP4015324 S/0032/64/030/001/0061/0063

AUTHORS: Zaytseva, L. P.; Porokhova, T. G.

TITLE: Application of the color microscopy method under ultraviolet light to the analysis of iron chromium nickel alloys

SOURCE: Zavodskaya laboratoriya, v. 30, no. 1, 1964, 61-63

TOPIC TAGS: colored microscopy, microscopic analysis, ultraviolet light analysis, iron alloy, chromium alloy, nickel alloy, carbide phase, intermalloid phase, MI19 microscope, three color photographic method, color photography

ABSTRACT: A method was developed by which the carbide and the intermetalloid phases of various alloying elements can be differentiated according to their "ultraviolet colors." The procedure was applied to the structure study of complex alloys on an Fe-Cr-Ni base. The metals were investigated after casting and after hardening and aging. The casts contained austenite, ferrite, and an intermetalloid phase (in alloys free of carbon), or a carbide phase (in alloys containing carbon). The ferrite decomposition took place in the process of aging

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ACCESSION NR: AP4015324

and was accompanied by the separation of different intermetalloid phases. By using a previously established color chart of the ultraviolet colors for different metal phases, it was possible to differentiate between these phases in the alloys and to determine qualitatively their composition. Orig. art. has: 2 tables.

ASSOCIATION: Leningradskiy politekhnicheskiy institut (Leningrad Polytechnical Institute)

SUBMITTED: 00

DATE ACQ: 03Feb64

ENCL: 00

SUB CODE: MM

NO REF SOV: 001

OTHER: 000

Card 2/2

ZAYTSEVA, L.P.; POROKHOVA, T.G.

Development of carbide and intermetallic phases by the method of chromatic ultraviolet microscopy. Zav. lab. 29 no.9:1088-1093 '63. (MIRA 17:1)

1. Leningradskiy politekhnicheskiy institut.

ZAYTSEVA, L.P.; POROKHOVA, T.G.; MANVELOVA, K.V.

Method of color microscopy in the ultraviolet for investigating the structure of iron-chromium alloys. Zav.lab. 28 no.7:812-814 '62 (MIRA 15:6)

1. Leningradskiy politekhnicheskiy institut.
(Iron-chromium alloys—Metallography)

L 17616-65 EWT(m)/T/EWP(t)/EWP(b) ASD(m)-3 JD/MLK

ACCESSION NR AM4046728 BOOK EXPLOITATION S/ B+1

Zaytseva, Lidiya Pavlovna; Porokhova, Tat'yana Grigor'yevna

Color metallography in visible and ultraviolet rays (TSvetnaya metallografiya v vidimy*kh i ul'trafioletovy*kh luchakh), Moscow, Izd-vo "Metallurgiya", 1964, 142 p. illus., biblio., col. microphotos.

TOPIC TAGS: metallography, ultraviolet microscopy, ferrous alloy, nonferrous alloy

PURPOSE AND COVERAGE: The book is the first text on the use of a method of metallographic analysis newly developed in the USSR -- the method of color transformation. The book cites the theoretical principles of two variations of the method: color ultraviolet microscopy and sequential etching. The equipment and the methodology for studying the structure of metals and alloys, which were developed in cooperation with specialists in metallurgy and optics, are described. Results of study of the structure of ferrous and nonferrous alloys using the method of color transformation show that this method increases the possibilities of normal metallographic analysis and makes it possible to differentiate phases of complex alloys. The book is intended for staff of research and educational institutes and metallurgists and mechanical engineers at the plant level. It can be useful to stu-

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L 17616-65
ACCESSION NR AM4046728

dents specializing in metallography.

TABLE OF CONTENTS [abridged]:

SUB CODE: MM SUBMITTED: 06Sep63 NR REF SOV: 046

OTHER: 015

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L 23831-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) Pu-4 IJP(c) JD/JG

ACCESSION NR: AT4045954 S/2563/64/000/234/0008/0017

AUTHOR: Zaytseva, L. P.; Porokhova, T. G.

B+1

TITLE: Investigation of the structure of Fe-Ti-C and Fe-Nb-C alloys by method of color microscopy in ultraviolet rays 27 27 27

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy*, no. 234, 1964. Metallovedeniye (Metallography), 8-17

TOPIC TAGS: iron, titanium, carbon, niobium, color microscopy, ultraviolet radiation, spectral analysis, potassium manganate, chromium phosphate, intermetallic phase, carbonitride, ferritic phase, chromoscope investigation

ABSTRACT: The method of ultraviolet color microscopy makes a qualitative chemical analysis possible on the basis of the colors of the phases of an alloy. These colors appear after photographing the micrographic specimens, using various visible and ultraviolet regions of a spectrum and subsequently combining the prints for chromoscopic study. The authors investigated Fe-Ti, Fe-Ti-C, Fe-Nb

Card 1/2

L 23830-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) Pu-4 IJP(c) JD/JG

ACCESSION NR: AT4045955 S/2563/64/000/234/0018/0024

AUTHOR: Zaytseva, L. P.; Porokhova, T. G.; Manvelova, K. V. 37

TITLE: Investigation of the structure of iron-tungsten-carbon and iron-molybdenum-carbon alloys by method of color microscopy with ultraviolet rays

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy*, no. 234, 1964. Metallovedeniye (Metallography), 18-24

TOPIC TAGS: iron, tungsten, carbon, molybdenum, ultraviolet radiation, chromium, titanium, niobium, carbide, caustic soda solution, potassium manganate solution

ABSTRACT: In preceding experiments the authors developed a method for the determination of the structure of alloys according to bright characteristic colors which are revealed under the effect of ultraviolet radiation. Furthermore the relevant colors were determined for carbide and the intermetallic phases of Cr, Ti and Nb making it possible to distinguish these phases in a complex alloy. The phases in Fe-W-C and Fe-Mo-C alloys were identified after etching with an

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L 23830-65

ACCESSION NR: AT4045955

aqueous solution of caustic soda and an alkaline solution of potassium manganate, both solutions giving good results. Under the microscope using ultraviolet light, the W and Mo phases were clearly visible and readily distinguished from ferrite, intermetallic and carbide phases. After etching an Fe-W-C alloy with an aqueous solution of caustic soda, the intermetallic phase shows up light brown under the microscope, carbide is brown and ferrite light. Molybdenum carbide was brown and its intermetallic and ferrite phase remain light. The intermetallic phase in W showed up red, tungsten carbide black and ferrite light green. Orig. art. has: 3 figures and 4 tables

ASSOCIATION: Leningradskiy politekhnicheskiy institut (Leningrad Polytechnic Institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NR REF SOV: 002 OTHER: 000

Card 2/2

ZAYTSEVA, L.P.; PORCKHOVA, T.G.

Use of the method of chromatic ultraviolet microscopy for the analysis of alloys on an iron-chromium-nickel base. Zav. lab. 30 no.1:61-63 '64. (MIRA 17:9)

1. Leningradskiy politekhnicheskiy institut.

POROKHOVA, V. Ya.; YAMSHCHIKOVA, N.A.

Exercise therapy in hysterical paralysis and paresis. Trudy 1-go MMI 24:344-352'63 (MIRA 17:3)

POROKHOVA, V.Ya.

Results of the use of therapeutic gymnastics and massage in syringomyelia. Trudy 1-go MMI 24:353-360 '63 (MIRA 17:3)

POROKHOVA, V. YA.

Porokhova, V. Ya.

"Methods of Studying Disorders and Restoring the Motor Functions Using Therapeutic Physical Culture together with the Physical Factors of Patients Suffering from the Results of Brain Injuries." First Moscow Order of Lenin Medical Inst. Moscow, 1955. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

GUSEVA, M.G., inzh.; POROLO, L.V., inzh.

Problems involved in the hydrogenation of fatty acids. Masl.-zhir.prom. 26 no.6:21-24 Je '60. (MIRA 13:6)

1. Rostovskiy maslozhirovoy kombinat (for Guseva). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.
(Acids, Fatty) (Hydrogenation)

DOKHMAN, G.I. (Moskva); POROKHOVNIK, P.Ye. (Moskva)

Agronomic sources of phytosociology. Bot.zhur. 47 no.4:586-591 Ap '62. (MIRA 15:8)

(Phytosociology)

DOKHMAN, G.I.; POROKHOVNIK, P.Ye.

From the history of Russian phytocenology (with two drawings). Bot.zhur. 38 no.2:300-306 Mr-Ap '53. (MLRA 6:6)
(Botany--Ecology)

DOKHMAN, G.I. (Moskva); POROKHOVNIK, P.Ye. (Moskva)

Agronomic origin of phytosociology. Report No.2.
Bot. zhur. 47 no.10:1534-1541 O '62. (MIRA 15:12)
(Phytosociology)
(Pasture research)

DOKHMAN, G.I. (Moskva); POROKHOVNIK, P.Ye. (Moskva)

Agronomic origin of phytosociology. Report No.2.
Bot. zhur. 47 no.10:1534-1541 O '62. (MIRA 15:12)
(Phytosociology)
(Pasture research)

POROKHOVNIK, P. Ye.

DOKHMAN, G.I.; POROKHOVNIK, P.Ye.

Ideas of phytocoenology during the 1860's (concerning A.M.Bazhanov's forgotten article). Biul.MOIP.Otd.biol.59 no.6:97-104 N-D '54. (MLRA 8:2)

(Botany--Ecology)

Порокопчик, А. Ю.

USSR/Physical Chemistry, Kinetics, Combustion, Explosions, Topochemistry, Catalysis. B-9

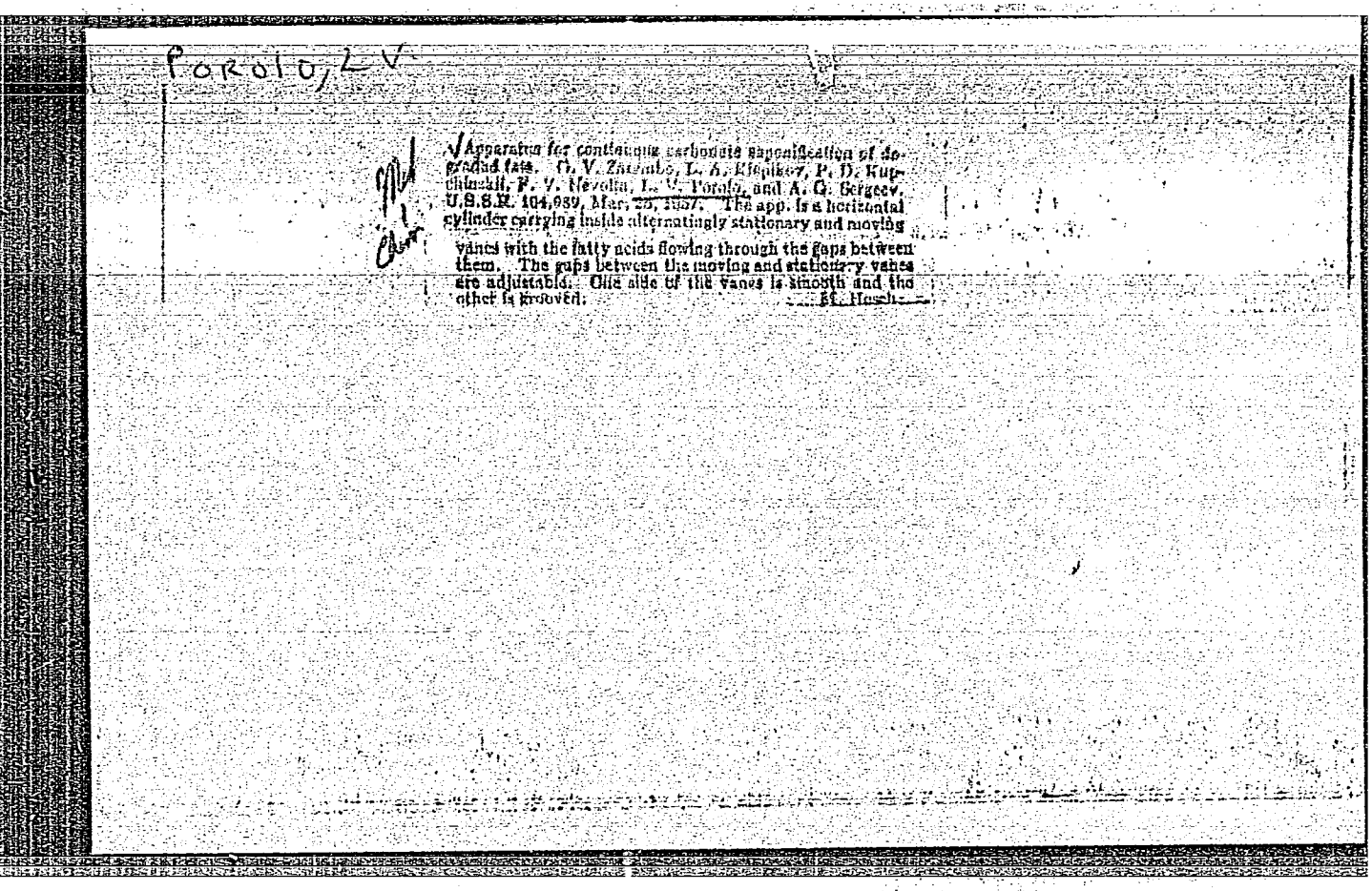
Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22377

Author : A. Yu. Porokopchik.
Inst : Not given
Title : To the Problem of Hypochlorite Homogenous catalytic decomposition. Action of Some admixtures on Hypochloric acid Decomposition Rate.

Orig Pub : Tr. AN LitSSR, 1956, B2, 41-50. (res. LIt.)

Abstract : Oxygen decomposition of HClO in homogeneous conditions is not catalyzed by Ni^{2+}, Co^{2+}, Fe^{3+}, Cu^{2+} and their binary mixtures Ce^{3+}, Cd^{2+}, Hg^{2+}, Mg^{2+}, La^{3+}, Zn^{2+}, Al^{3+}, Ti^{3+}, Pb^{2+}, Ba^{2+}, NO_3^-, SO_4^{2-}, $H_2BO_4^-$, $Cr_2O_7^{2-}$, ClO_3^-, BrO_3^-, MnO_4^-, and $S_2O_8^{2-}$. In the presence of chlorides a reaction starts, which results in the decrease of HClO concentration, but this reaction does not represent HClO oxygenous decomposition but rather an oxidation $HCl + HClO \rightarrow Cl_2 + H_2O$.

Card 1/1 -127-



P0R010,2V

Apparatus for continuous carbonate saponification of degraded fats. G. V. Zaremba, L. A. Klepikov, P. D. Kupchinskii, F. V. Nevolin, L. V. Pondo, and A. G. Gergeev. U.S.S.R. 104,989, Mar. 25, 1957. The app. is a horizontal cylinder carrying inside alternatingly stationary and moving vanes with the fatty acids flowing through the gaps between them. The gaps between the moving and stationary vanes are adjustable. One side of the vanes is smooth and the other is grooved. M. Hosh

IRODOV, M.V., kand.tekhn.nauk; POROLO, L.V., inzh.; ARUTYUNYAN, N.S., inzh.
Dmitriyeva, N.A.

Experience in the continuous splitting of fats in a column-type apparatus. Masl.-zhir.prom. 26 no.7:30-31 Jl '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Irodov, Porolo). 2. Zaporozhskiy maslozhirovoy kombinat (for Arutyunyan, Dmitriyeva).
(Zaporozh'ye--Oils and fats)

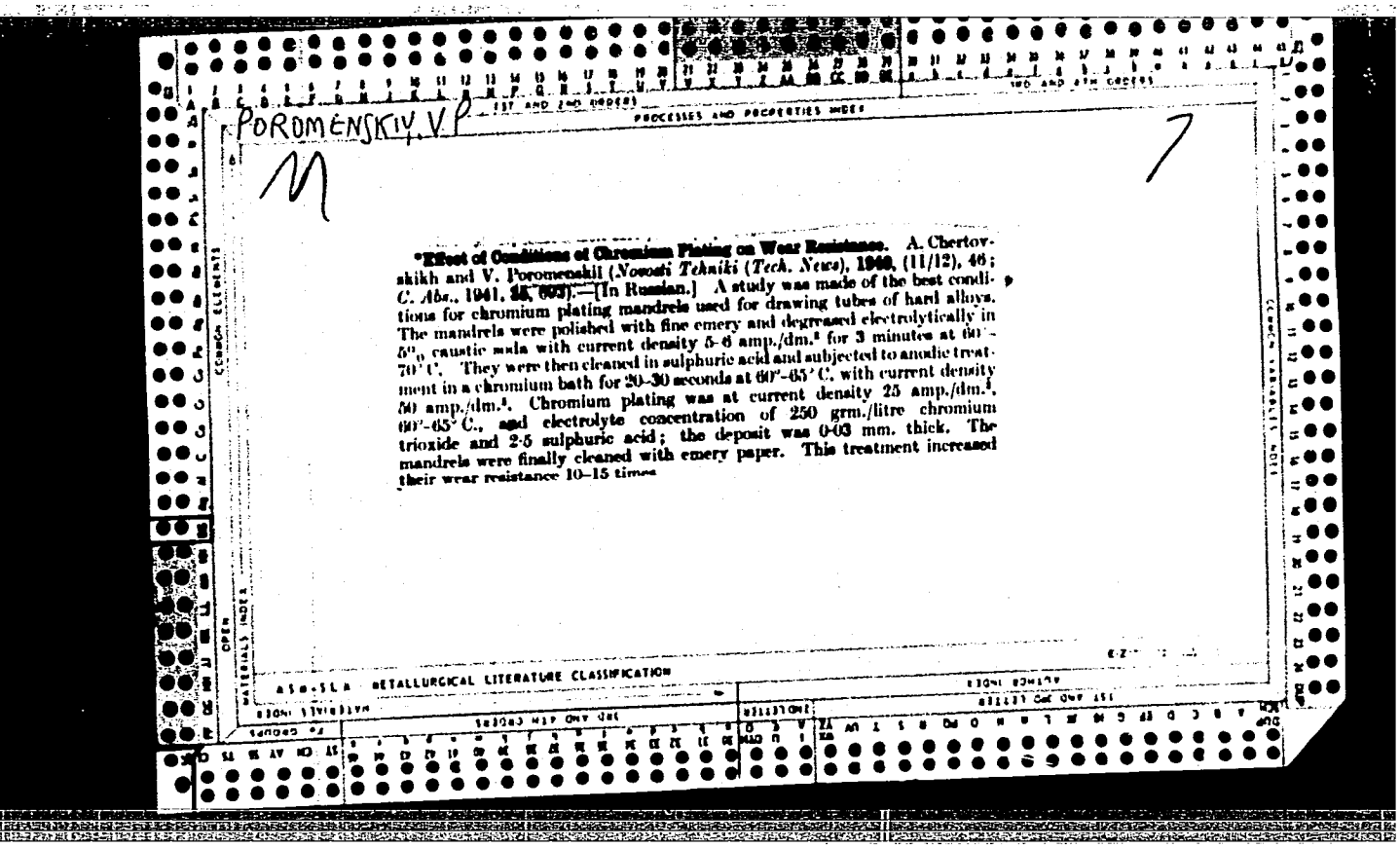
m.d. POROMENSKIY, V.P.

1. Properties of Metal

"The External Friction of Metals During Their Plastic Deformation. A. I. Chertavskikh and V. P. Poromanaky (*Vestn. Metalloprom.* (*Met. Ind. Herald.*, 1939, 19, (6), 14–18).—[In Russian.] The coeff. of external friction of a number of metals was determined by compressing short cylinders of the metals between cone-shaped tools in an Amsler press and measuring the dimensions of the cylinders afterwards. The mean values of the coeff. for various metals against steel EKh 12 (of which the tools were made) so obtained are: tin 0·18, lead 0·33, cadmium 0·24, bismuth 0·27, nickel 0·32, zinc 0·17, copper 0·30, aluminium 0·74. In these experiments no relationship can be established between the coeff. of friction and the Brinell hardness or melting-temperature of the metals. This is ascribed to the fact that the soft metals are self-lubricating and so facilitate plastic flow during deformation."

—N. B. V.

1963



PROCESSES AND PROPERTIES INDEX

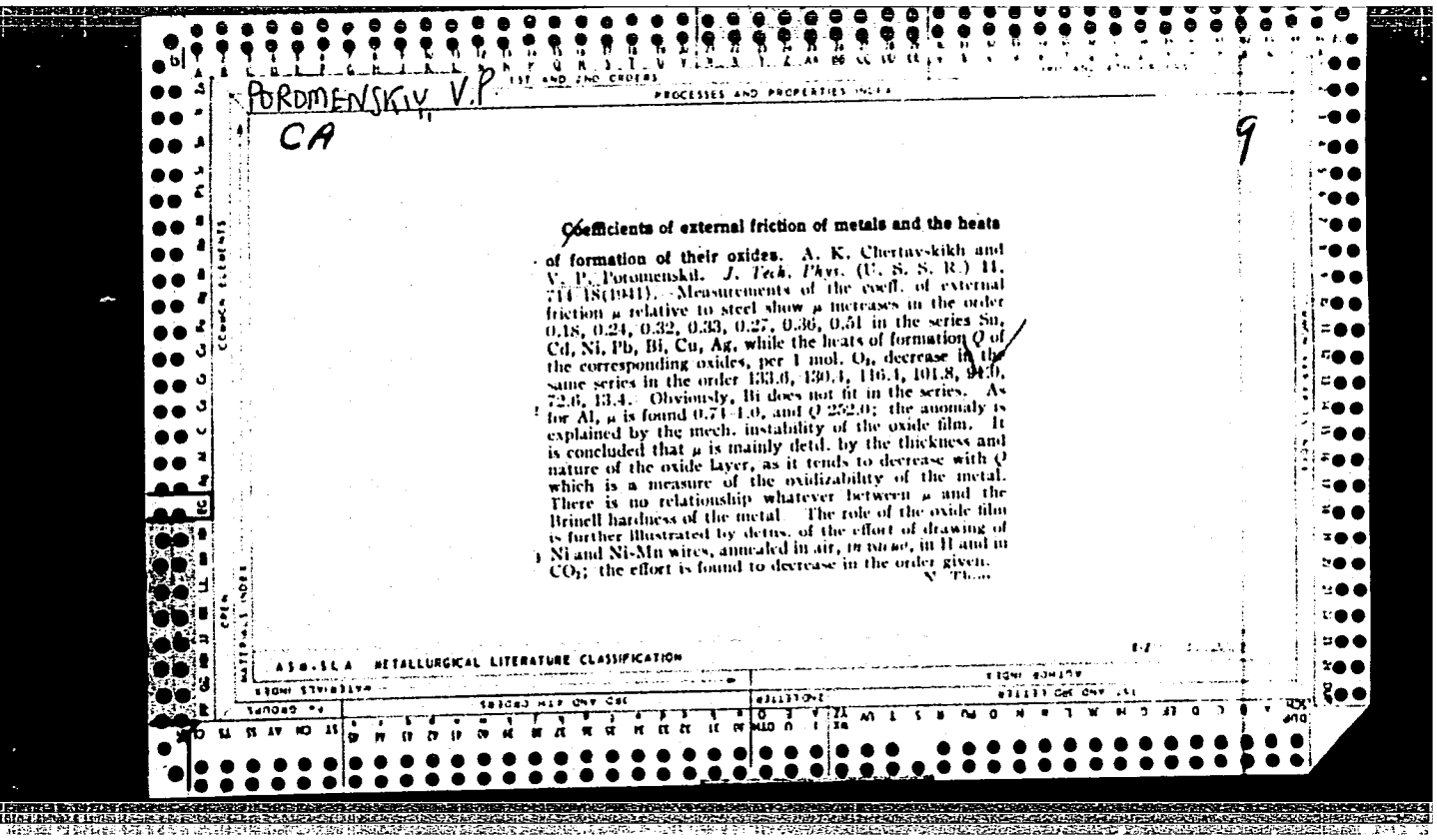
PORMENSKIY, V.P

M

7

Effect of Conditions of Chromium Plating on Wear Resistance. A. Chertovskikh and V. Poromenskii (*Novosti Tekniki* (*Tech. News*), 1940, (11/12), 46; *C. Abs.*, 1941, 35, 603).—[In Russian.] A study was made of the best conditions for chromium plating mandrels used for drawing tubes of hard alloys. The mandrels were polished with fine emery and degreased electrolytically in 5% caustic soda with current density 5–6 amp./dm.^{2} for 3 minutes at 60°–70° C. They were then cleaned in sulphuric acid and subjected to anodic treatment in a chromium bath for 20–30 seconds at 60°–65° C. with current density 50 amp./dm.^{2}. Chromium plating was at current density 25 amp./dm.^{2}, 60°–65° C., and electrolyte concentration of 250 grm./litre chromium trioxide and 2·5 sulphuric acid; the deposit was 0·03 mm. thick. The mandrels were finally cleaned with emery paper. This treatment increased their wear resistance 10–15 times.

A58-SLA METALLURGICAL LITERATURE CLASSIFICATION



PORUMENSKIY V.P

CA

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Coefficients of external friction of metals and the heats of formation of their oxides. A. K. Chertavskikh and V. P. Porumenskii. *J. Tech. Phys.* (U. S. S. R.) 11, 714-18(1941). Measurements of the coeff. of external friction μ relative to steel show μ increases in the order 0.18, 0.24, 0.32, 0.33, 0.27, 0.36, 0.51 in the series Sn, Cd, Ni, Pb, Bi, Cu, Ag, while the heats of formation Q of the corresponding oxides, per 1 mol. O_2, decrease in the same series in the order 133.0, 130.4, 116.4, 101.8, 94.0, 72.6, 13.4. Obviously, Bi does not fit in the series. As for Al, μ is found 0.71-1.0, and Q 252.0; the anomaly is explained by the mech. instability of the oxide film. It is concluded that μ is mainly detd. by the thickness and nature of the oxide layer, as it tends to decrease with Q which is a measure of the oxidizability of the metal. There is no relationship whatever between μ and the Brinell hardness of the metal. The role of the oxide film is further illustrated by detns. of the effort of drawing of Ni and Ni-Mn wires, annealed in air, *in vacuo*, in H and in CO_2; the effort is found to decrease in the order given.

N. Thon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PORONDRA, P.; ROUBALOVA, D.

Rapid analytic methods for testing metals and inorganic materials. XI. Determination of phosphoric acid in natural-iron phosphate after a separation by ion exchange. Coll Cz Chem 25 no.7:1890-1894 Jl '60. (EEAI 10:9)

1. Laboratorium fur analytische Chemie, Chemisches Institut, Tschechoslowakische Akademie der Wissenschaften, Prag.

(Metals) (Inorganic compounds) (Phosphoric acid)
(Iron phosphates) (Ion exchange)

NAYDENOV, B., kand. tekhn. nauk; PORONIK, B., inzh.; PRONIN, V., inzh.; ZHEREBNOY, P., inzh.

Examiner and coach. Radio no.3:21-22 Mr '64 (MIRA 17:7)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

PORDS, T.

H

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MAGYAR TEXTILTECHNIKA
HUNGARIAN TEXTILES
VOL IV 1951
no. 4, April

Gy. Herczegh
and Mrs. T. Poros:
Comments to the article by *R.* *Franzuso:* „The utilization of bentonite in the textile printing trade" 126--127

PYATKIN, Ye.K.; POROSHENKO, G.G.

Manifestation of two cell lines in the bone marrow and in peripheral blood culture in chronic myeloleukemia. Vest. AMN SSSR 20 no.3:21-25 '65. (MIRA 18:7)

1. TSentral'nyy institut usovershenstvovaniya vrachey i Institut biofiziki AN SSSR, Moskva.

SURIN, V.M.; POROSENKOV, V.S.

Submucosal lipoma of the sigmoid intestine complicated by invagination. Klin.khir. no.7:75-76 Jl '62. (MIRA 15:9)

1. Khirurgicheskoye otdeleniye Romodanovskoy rayonnoy bol'nitsy Mordovskoy ASSR.
(COLON (ANATOMY)--TUMORS) (INTESTINES--INTUSSUSCEPTION)

BEL'SKIY, N.N.; POROSENKOV, Yu.V.

Economic evaluation of the landscape type of the Lenin Collective Farm, Kirsanov District, Tambov Province. Izv.Vor.otd.Geog.ob-va no.3:29-35 '61. (MIRA 15:11)
(Kirsanov District--Physical geography)
(Kirsanov District--Collective farms--Management)

POROSHENKOV, G. A., (Engr.) and VORMS, V. V. (Engr.)

"The Organization and Technical Side of the Measures Taken in Leningrad for the Decrease of the Danger of Corrosion in Undreground Buildings at the Source of Stray Currents."

report presented at the Odessa Conference on the Fighting of Corrosion Caused by Stray Currents, Nov 1957. Odessa Branch NTOEP (Elektrichestvo, "%* '58,4:83)

BOLDIN, K.M. (Yaroslavl'); DROZDOVA, Z.S.; LEVIN, R.I.; VAYSMAN, L.A. (Kuybyshev-obl.); PODOSINOVSKIY, V.V.(Kazan'); SAYFULLINA, Kh.M. (Kazan'); EUSYGIN, N.V.(Kazan'); RAZUMOVSKIY, Yu.K.(Leninogrosk); GEL'FER, G.A., dotsent (Gor'kiy); MAMISH, M.G.(Kazan'); RAFALOVICH, M.B., dotsent; MEL'NICHUK, S.P., kand.med.nauk; KRAPIVIN, B.V.; STAROVEROV, A.T. (Saratov); SURIN, V.M.; POROSENKOV, V.S.(Romodanovo, Mordovskoy ASSR); ANDROSOV, M.D.(Moskva); ZARIPOV, Z.A.(Urussu, Tatarskoy ASSR); MURAV'YEV, M.F.(Izhevsk); KUZ'MIN, V.I.(Batyrevo, Chuvashskoy ASSR); SITDYKOV, E.N.(Kazan'); YUDIN, Ya.B.(Novokuznetsk)

Short reports. Kaz.med.zhur. no.4:81-91 Jl-Ag '62. (MIRA 15:8)
(MEDICINE--ABSTRACTS)

POROSHIN, A.F.

Method of exercise therapy for elderly people at health resorts. Vop.kur., fizioter. i lech.fiz.kul't. 27 no.3:252-254 My-Je '62. (MIRA 15:9)

1. Iz kafedry fizicheskogo vospitaniya i vrachebnoy fizicheskoy kul'tury (zav. - kand.med.nauk A.F.Poroshin) Kubasnkogo meditsinskogo instituta.

(EXERCISE THERAPY) (HEALTH RESORTS, WATERING-PLACES, ETC.) (AGING)